Atari 400 and Atari 800 Home Computers

The Atari 800 shown here consists of a 16KB RAM, cassette program recorder, 40-cps 4-inch roll printer, 5¼-inch 88KB mini-diskette drive, and a user-supplied color TV set or monitor. Programs can be loaded either via plug-in ROM cartridges, cassette tapes, or diskettes. The 800 is programmable in Basic or Assembly language.

Current models: Atari 400; Atari 800.
Memory: 16KB-48KB RAM.
Storage capacity: 88KB—352KB diskettes.
Workstations: one.
Base list price: Atari 400—$299 including processor, 16KB RAM, keyboard, built-in RF modulator, internal speaker. Atari 800—$899 including same as Atari 400 plus Basic cartridge, different keyboard, monitor jack.
Typical list prices: Atari 400 (student)—$465 including same as base configuration plus educator kit, Atari 800—$1,675 including processor 48KB RAM, disk drive, 80 column printer, interface module, cables.
Popular options: from Atari—joystick, paddles, printers, diskette drive, add-on memory, modems; from independents—home controller, graphic I/O tablet, plotter.
Principal programming languages: Basic, Assembly, Pilot.
Principal applications software: home office, music, education, statistics, games.
First shipment: 1979.
Number installed to date: information not available.
Available through: about 2100 direct and indirect vendors, computer dealers and electronics specialty shops, Sears Roebuck and Penney's.

BACKGROUND INFORMATION

Atari Inc., Home Computer Division, a Warner Communications Company, 1312 Crossman, P.O. Box 61657, Sunnyvale, CA 94086. Telephone (408) 942-6500.

When Atari entered the home computer marketplace in 1979, it came as no great surprise to the industry. With revenues of about $200 million per year and a highly successful track record in manufacturing and marketing high technology consumer electronic games, it was natural for Atari to turn its attention to personal computers.

Atari sells two home computers: the Atari 400 and Atari 800. The Atari 400 is a limited size (16K bytes), low-end system intended for home use. The Atari 800 has more RAM capacity and is capable of handling small business and professional applications, as well as sophisticated home processing applications.

In addition to relying on its strong distribution network, Atari stresses that a major selling point of the Atari 400 and Atari 800 systems is the use of plug-in ROM cartridges. These cartridges provide low-cost, easy-to-use program availability.

SYSTEM CHARACTERISTICS

The Atari computers are compact units consisting of a keyboard chassis which holds the plug-in ROM and provides a serial I/O port for external peripherals and four controller jacks for joystick and paddle controllers. Four independent sound synthesizers are incorporated into the console to provide sound effects through a TV set.

Each system contains an RF modulator which enables it to connect to any TV. Text is displayed in three modes and graphics in nine modes. The keyboard provides 57 alphanumeric keys plus four special function keys.

The differences between the two systems are as follows: 1) RAM capacity: 16K bytes on the Atari 400, 16K bytes expandable to 48K bytes on the Atari 800; 2) keyboard: monopanel, touch sensitive on the Atari 400, regular typewriter-style on the Atari 800; 3) a jack on the Atari 800 enabling the system to be used with a monitor instead of a TV if desired; 4) ROM cartridge slots: one on the Atari 400, two on the Atari 800.

The Atari 400 is capable of attaching game controls, a cassette recorder, and a 40-column printer as external peripherals in addition to a TV set display. An acoustic modem with an interface module is also available.

The Atari 800 can use all of the Atari controllers and peripherals as well as support all of the Atari 400's programs. Additionally, up to four 88K byte diskette drives can be attached to the Atari 800. The Atari 800 can utilize 40 or 100 cps printers, as well as support several software packages not available for the Atari 400.

Atari offers Starter Kits which contain all the materials needed to use the computer for entertainment, education, communications and programming. Additionally, two other kits, The Bookkeeper and The Home Manager, are available, but only for the Atari 800.

Atari 400 and Atari 800 Home Computers

HARDWARE/PACKAGING

PROCESSOR/MEMORY
Model: 6502; 8 bits
RAM: Atari 400—16KB; Atari 800—16KB-48KB
ROM: Atari 400—10KB internal, 2KB-16KB cartridge; Atari 800—10KB internal, 2KB-16KB cartridge
Processor options: additional 8KB RAM ($49.95); 16KB RAM ($99.95)

DISPLAY
Model: color or B/W TV set (or monitor with Atari 800)
Screen size: any size
Chars./screen: 960 (40 chars. x 24 lines); 480 (20 chars. x 24 lines); 240 (20 chars. x 12 lines)
Char. type: upper/lower case; 8 x 8 matrix
Features: normal, inverse, pallet of 256 colors of which 128 may be displayed simultaneously
Graphics: nine modes, from 40 x 24 up to 320 x 192
Interface: integral cable plug; RF modulator included

KEYBOARD
Type: Atari 400—typewriter style, non-tactile, fixed; Atari 800—typewriter style, tactile, fixed; optional numeric keypad ($124.95)
No. of keys: 57, ASCII character set
Interface: integral connection

DIRECT ACCESS STORAGE
Model: Atari 810 Disk Drive
Type: 5¼" mini diskette
Capacity/drive: 88KB
Drives/system: 1-4
Avg. access time: 74 milliseconds
Transfer rate: 19.2KBS
Interface: 1 port
Price: $599.95 with controller

PRINTERS

Model:	820	822	825
Type:	matrix, impact	matrix, thermal	matrix, impact
Paper:	plain paper, roll, 4"	thermal, roll, 4"	fanfold, tractor, 9.5" single sheets
Char. set:	96	96	96
Chars./line:	40	40	80
Speed:	40 cps	37 cps	100 cps
Interface:	serial	serial	Interface Module
Price:	$299.95	$299.95	$799.95

DATA COMMUNICATIONS
Model: Atari 830 Acoustic Modem
Trans. mode: half/full-duplex
Protocol: asynchronous
Lines: one
Speed: 300 bps
Interface: Interface module
Price: $199.95

OTHER I/O
Magnetic tape: Atari 410 Program Recorder, ($99.95)
Game controls: 2 handheld paddles ($21.95), 2 joysticks ($21.95)
Loudspeaker: built-in; 4-channel audio channel through TV set
Interface module: ($219.95)

I/O ELECTRONICS
Structure: 4 controller input jacks; Atari 400—1 external and 1 internal cartridge slot, Atari 800—2 external and 3 internal

cartridge slots, 1 high speed serial I/O port, can connect Model 850 Interface Module to provide 4 RS-232 serial ports and 1 parallel port.

SOFTWARE

LANGUAGES
Basic: Atari Basic (ROM cartridge—$59.95; included with Atari 800); Microsoft Basic (diskette—$89.95)
Assembler: Assembler Editor (ROM cartridge—$59.95); Macro Assembler and Program Text Editor (diskette—$89.95)
PILOT (with turtle graphics): home package ($79.95); educator's package ($129.95)

OPERATING SYSTEM
Name: Atari Operating System
System requirements: 10KB ROM (included with system)
Concurrent tasks: one
Other functions: I/O device handling, keyboard and screen editing

UTILITIES
Sort: no
Text editor: no

DATABASE MANAGEMENT SYSTEMS
Name: none specified

COMMUNICATIONS SUPPORT
Name: TeleLink I ($29.95)
System requirements: modem and interface module
Functions: allows access to databases and communications with other type of computers

APPLICATIONS PROGRAMS
Accounting: The Bookkeeper ($149.95)
Education: Energy Czar, Hangman, Kingdom, States & Capitals, European Countries and Capitals; Invitation to Programming ($24.95-$29.95), Biorhythm ($14.95), Conversational French, German, Spanish and Italian ($59.95 each), Music Composer ($59.95), Touch Typing ($24.95)
Entertainment: ROM cartridges ($34.95-$54.95): Basketball, Computer Chess, Star Raiders, Super Breakout, 3-D Tic-Tac-Toe, Video Easel; Space Invaders, Asteroids, Missile Command, Pac-Man, Centipede; Cassettes: Blackjack ($14.95)
Finance: Bond Analysis ($24.95), Dow Jones Investment Evaluation ($129.95); Graph It ($19.95), Mortgage & Loan Analysis ($19.95), Stock Analysis ($24.95), Stock Charting ($29.95)
Math/Statistics: Statistics ($19.95)
Word Processing: Atari Word Processor ($149.95)
Others: Home Filing Manager ($49.95)

SUPPORT SERVICES

DOCUMENTATION
Range: about 14 manuals available ($3.95 to $29.95)

SUPPORT
Training & education: none from Atari; available at discretion of dealer
Maintenance: available through more than 200 factory-authorized service centers

TERMS AND CONDITIONS
Lease terms: none
Discounts: none officially; available at retail level; some dealers and mail-order houses will offer up to 15% off list
Warranties: 90-days—parts and labor
Software terms: none specified ■